

**Material Safety Data Sheet:**

Engol Hydraulic Agri-Fluid UTTO

**1. Product and Company Identification**

Product Name : Engol Hydraulic Agri-Fluid UTTO  
Product Use: Hydraulic and Transmission  
Supplier: Engol Group (Pty) Ltd  
4 Silicon Road,  
Pinetown,  
4147  
Health Emergency Telephone: 10111  
Contact Information: info@engolgroup.com  
Engol Website : http://www.engolgroup.com

**2. Hazards Identification**

Emergency response data: Amber Liquid. DOT ERG No. - Not applicable.

**GHS Classification:****Health**

Acute inhalation toxicity warning: May be harmful if inhaled. Hazard category 4.  
Acute oral toxicity warning: May be harmful if swallowed. Hazard category 5.  
Skin irritation warning: Practically non-irritating. Hazard category 3.  
Eye irritation warning: Mild irritant. Hazard category 2B.

**Environmental**

Aquatic toxicity warning: Hazard category 3. Toxic to fish, aquatic life and wildlife.

**Physical**

Flammability warning: Combustible liquid. This product is non-flammable.

**Hazard Statement**

Combustible liquid. May cause mild eye irritation. May be harmful if swallowed or inhaled.

**Precautionary Statements****Response**

IN CASE OF FIRE: Use dry chemical, foam or carbon dioxide for extinction.  
IF IN EYES: Rinse cautiously with water for several minutes.  
IF SWALLOWED: Seek medical attention if you feel unwell.  
IF INHALED: Remove person to fresh air and keep up at a resting position for breathing.

**Disposal**

Do not discharge into lakes, streams, ponds and ground water supply.

See section 11 for further health effect/toxicological data.

**3. Composition / information on ingredients**

Chemical Name	CAS-No	Weight %
Base Oil	15	>90%
Additives	15	<10%

See section 8 for exposure limits (if applicable).

#### 4. First Aid Measures

General Information:	Not expected to be a health hazard when used under normal conditions.
Inhalation:	Not expected to be a problem. However, if respiratory irritation occurs due to excessive vapour or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with mechanical device or use mouth-to-mouth resuscitation.
Skin Contact:	Remove contaminated clothing. Dry wipe exposed skin and cleanse with hand cleaner, soap and water. Launder contaminated clothing before reuse.
Eye Contact:	Flush thoroughly with water. If irritation occurs consult a doctor.
Ingestion:	Not expected to be a problem. However if discomfort occurs seek medical attention. Do not induce vomiting.
Self-protection of the First Aider:	When administering first aid, ensure that the appropriate personal protective equipment are worn, according to the incident, injury and surroundings.
Most important symptoms and effects, both acute and delayed:	Oil acne/folliculitis signs and symptoms may include formation of black pustule and spots on the skin of exposed area.
Indication of any immediate medical notes to doctor/physician:	Treat symptomatically.

#### 5. Fire-Fighting Measures

**Clear fire area of all non-emergency personnel.**

Extinguishing Media:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be Used for small fires only.
Special firefighting procedure:	Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or Dilution from entering streams, municipal sewers, or drinking water supply.
Special protective equipment for firefighters:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.
Unusual fire and explosive Hazard:	None
Products of decomposition:	Fumes, carbon monoxide, sulphur dioxide, aldehydes and other decomposition products, In the case of incomplete combustion.
Flash Point:	> 224°C (ASTM D92)
Upper Explosion Limit (UEL):	7.0% (V)
Lower Explosion Limit (LEL):	0.9% (V)
NFPA Hazard ID:	Health: 0 ; Flammability: 1 ; Reactivity: 0
Advice for firefighters:	Proper protective equipment including chemical resistant gloves are to be worn; chemical Resistant suit is indicated if excessive contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant standards.

#### 6. Accident Release Measures

Personal precautions:	See Section 8.
Procedure if material is released or spilled	Report spills/releases as required to appropriate authorities.

Methods for cleaning up and: containment

LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimise the effects on ground water. Recover by pumping using explosion-proof equipment or contain spilled liquid with sand or other suitable absorbent or remove mechanically into containers.

If necessary, dispose of absorbent residues as directed in Section 13. WATER SPILL: Notify port and relevant authorities. Confine with booms if skimming equipment is available to recover the spill for later recycling or disposal.

Environmental precautions:

Warn other ships in the vicinity. If allowed by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.

Additional advice:

Prevent spill from entering municipal sewers, water sources or low lying areas. Advise the Relevant authorities if contaminations have occurred.

Local authorities should be advised if significant spillages cannot be contained.

## 7. Handling & Storage

General precautions:

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fire. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Handling:

Avoid prolonged or repeated contact with skin. Avoid inhaling vapours and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Storage:

Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable container. Storage temperature: 0 – 50°C / 32 – 122° F. Do not store near heat sources, flames, sparks combustible material or strong oxidising agents.

Product transfer:

This material has the potential to be a static accumulator. Proper grounding and bonding procedure should be used during bulk transfer operations.

Conditions for safe storage: including any incompatibilities

Store at ambient temperature.

Recommended materials:

Use mild steel or high density polyethylene for containers or container linings.

Unsuitable materials:

PVC

Specific end use(s):

Not applicable.

Additional information:

Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

## 8. Exposure Control / Personal Protection

Occupational Exposure Limits (OELs)

Components	CAS-No	Source	TWA	Value	Notation
LTEL:		Long Term Exposure Limits – Time Weight Average (TWA) over 8 hours.			
STEL:		Short Term Exposure Limits – Time Weight Average (TWA) over 15 minutes.			
Note:		Limits Shown for guidance only. Follow applicable regulations.			

**Personal Protection Equipment:**

Engineering controls:	If mists are generated, use ventilation, local exhaust or enclosures to control below exposure limits.
Respiratory protection:	Approved respiratory equipment must be used when mist concentrations exceed the recommended exposure limits.
Eye protection:	If splash with liquid is possible, chemical type goggles should be worn.
Skin and body protection:	No special equipment required. However, if frequent splashing or liquid contact is likely to occur, wear oil impervious gloves and clothing. Good personal hygiene practices should always be followed.

**9. Physical and Chemical Properties**

Appearance:	Liquid at room temperature.
Colour:	Dark Amber
Odour:	Slight hydrocarbon
Water solubility:	Negligible
Solubility in other solvents:	No data available.
Boiling point:	> 300°C
Upper Explosion Limit (UEL):	7.0% (V)
Lower Explosion Limit (LEL):	0.9% (V)
Kinematic Viscosity:	66 mm <sup>2</sup> /s @ 40°C (ASTM D-445) 10.7 mm <sup>2</sup> /s @ 100°C (ASTM D-445)

**10. Stability & Reactivity**

Reactivity:	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical Stability:	No hazardous reaction is expected when handled and stored according to provisions.
Possibility of hazardous reactions:	Reacts with strong oxidising agents.
Stability:	Stable.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Materials to avoid:	Strong oxidising agents.
Hazardous decomposition products:	Fumes, smoke, carbon monoxide, sulphur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

**11. Toxicological Information**

Basis for Assessment:	Information given is based on data on the components and the toxicology of similar products. Unless otherwise indicated, the data presented is representative of the product as a whole, rather than for individual component(s).
Likely routes of exposure:	Skin and eye contact are the primary routes of exposure.
Acute Oral Toxicity:	Expected to be of low toxicity: LD50 > 5000 mg/kg. Rat.
Acute Dermal Toxicity:	Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit.
Acute Inhalation Toxicity:	Not considered to be an inhalation hazard under normal conditions of use.

Skin Irritation:	Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Eye Irritation:	Expected to be slightly irritating.
Respiratory Irritation:	Inhalation of vapours or mists may cause irritation.
Sensitisation:	Not expected to be a skin sensitiser.
Aspiration Hazard:	Not considered to be an aspiration hazard.
Repeated Dose Toxicity:	Not expected to be a hazard.
Mutagenicity:	Not considered to be a mutagenic hazard.
Carcinogenicity:	Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other compounds are no known to be associated with carcinogenic effects.
Reproductive and Developmental Toxicity:	Not expected to be hazard.
Specific target organ toxicity: and (STOT) - Single exposure	Although an acute inhalation study was not performed with this product, a variety of mineral. Synthetic oils, such as those in this product, have been tested. These samples had virtually no Effect other than nonspecific inflammatory response in the lung to the aerosolized mineral oil. The presence of additives in other tested formulations (in approximately the same amounts as in the present formulation) did not alter the observed results
Specific target organ toxicity: similar (STOT) - repeated exposure:	No significant adverse effects were found in studies using repeated dermal applications of formulations to the skin of the laboratory animals for 13 weeks at doses significantly higher than those expected during normal industrial exposure. The animals were evaluated extensively for effects of exposure (haematology, serum chemistry, urinalysis, organ weights, microscopic examination of tissues etc.). Repeated and/or prolonged exposure may cause irritation to the skin, eyes or respiratory tract.
Additional Information:	Used oil may contain harmful impurities that have accumulated during use. The concentration Of such impurities will depend on use and they may present risk to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. Continuous contact with used engine oils has caused skin cancer in animal tests.

## 12. Ecological Information

### Ecotoxicity Effects

Toxicity to Fish:	(Salmon) LC/EC50: 8.1 mg/l at 96 hours.
Toxicity to aquatic organisms:	(Daphnia magna) LC/EC50: 9.4 mg/l at 8 hours.
Mobility:	Liquid under most environmental conditions. Floats on water. If it enters soil, it will absorb into soil particles and not be mobile.
Persistence/degradability:	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
Bioaccumulation:	Contains components with the potential to bioaccumulate.
Other adverse effects:	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

### 13. Disposal Considerations

Waste Disposal:	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.
Contaminated Packaging:	Do not dispose into the environment, in drains or in water courses. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not Pressurize, cut, weld, braze, solder etc. or expose such containers to heat, flames, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.
Local Legislation:	Disposal should be in accordance with applicable regional, national and local law regulations.

### 14. Transportation Information

ADR:	This material is not classified as dangerous under ADR regulations.
RID:	This material is not classified as dangerous under RID regulations.
ADNR:	This material is not classified as dangerous under ADNR regulations.
IMDG:	This material is not classified as dangerous under IMDG regulations.
IATA (Country variations may apply):	This material is not classified as dangerous under IATA regulations.

### 15. Regulatory Information

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

EC Classification:	Not classified as dangerous under EC criteria.
EC Risk Symbols:	No Hazard Symbol required.
EC Risk Phrases:	Not classified.
EC Safety Phrases:	Not classified.
EINECS	All components listed or polymer exempt.
TSCA:	All components listed.

### 16. Other Information

R-phras(e)s(n):	Not classified.
MSDS Version Number:	1.0
MSDS Effective Date:	01.05.2017
INJECTION INJURY WARNING:	If product is injected into or under the skin, or into and part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a doctor as a surgical emergency.

### Technical Data Sheet:

#### Engol Universal Tractor Transmission Oil

#### Specifications, Performance Standards & Recommendations:

- John Deere : JDM J20C/J20D
- CNH : MAT 3525 ("134-D" fluid)
- Massey Ferguson : CMS M1141, CMS M1143
- VCE : WB 101
- ZF : TE-ML-03E & TE-ML-05F

Engol Universal Tractor Transmission Oil is recommended for transmissions, hydraulic systems, final drives and power steering systems and fluid immersed disc brakes in agricultural and industrial tractors and similar equipment. It is also recommended for hydrostatic drives in contractor and industrial equipment. Whilst it is suitable for topping up tractor transmissions and torque converters where A, Suffix A, DEXRON, Type and Type F Fluids are recommended. It should not be used for passenger car automatic transmissions.

#### Description:

A high quality, multifunctional, extreme pressure fluid to meet the service top-up and refill needs of transmissions, final drives, hydraulic and power-steering systems and fluid immersed disc brakes of virtually all farm and industrial tractors and mobile equipment, especially where many components must be satisfied with a fluid from a common source. Engol Universal Tractor Transmission Oil has a high viscosity index to minimise viscosity changes with changing temperatures. It is extremely stable even in severe high-temperature torque-converter use and has excellent anti-wear properties. Frictional properties are designed to assure proper, decisive functioning of multi-disc clutches used in some transmission designs requiring a limited slip function and in oil immersed disc brakes.

#### Benefits:

- Maximum protection against wear and corrosion.
- Good anti-chatter in wet brake systems.
- Excellent oxidation stability.
- Compatibility with seals and elastomer materials in tractors.

#### Typical Physical Characteristics:

Engol Universal Tractor Transmission Oil	
SAE No.	80W
Viscosity, cSt @ 40°C	66.0
Viscosity, cSt @ 100°C	10.7
Viscosity Index	170
Flash Point, °C	224
Pour Point, °C	-39

\*The values of the specifications shown in this table are typical values given as an indicator only.

#### Pack Sizes:

- 5 Litre and 20 Litre Plastic Bottles
- 208 Litre Steel Drums
- 1000 Litre IBC

#### Health and Safety Information:

For recommendations on safe handling and use of this product, please refer to the Material Safety Data sheet available on [www.engolgroup.com](http://www.engolgroup.com)

Misrepresentation Act 1967. Trade description Act 1968. The information in this publication is based on our experience and reports from customers. There are many factors outside our control and knowledge which effect the use and performance of our products for which reason no warranty is given, express or implied. This information sheet was prepared from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that products are used in the applications for which are intended.